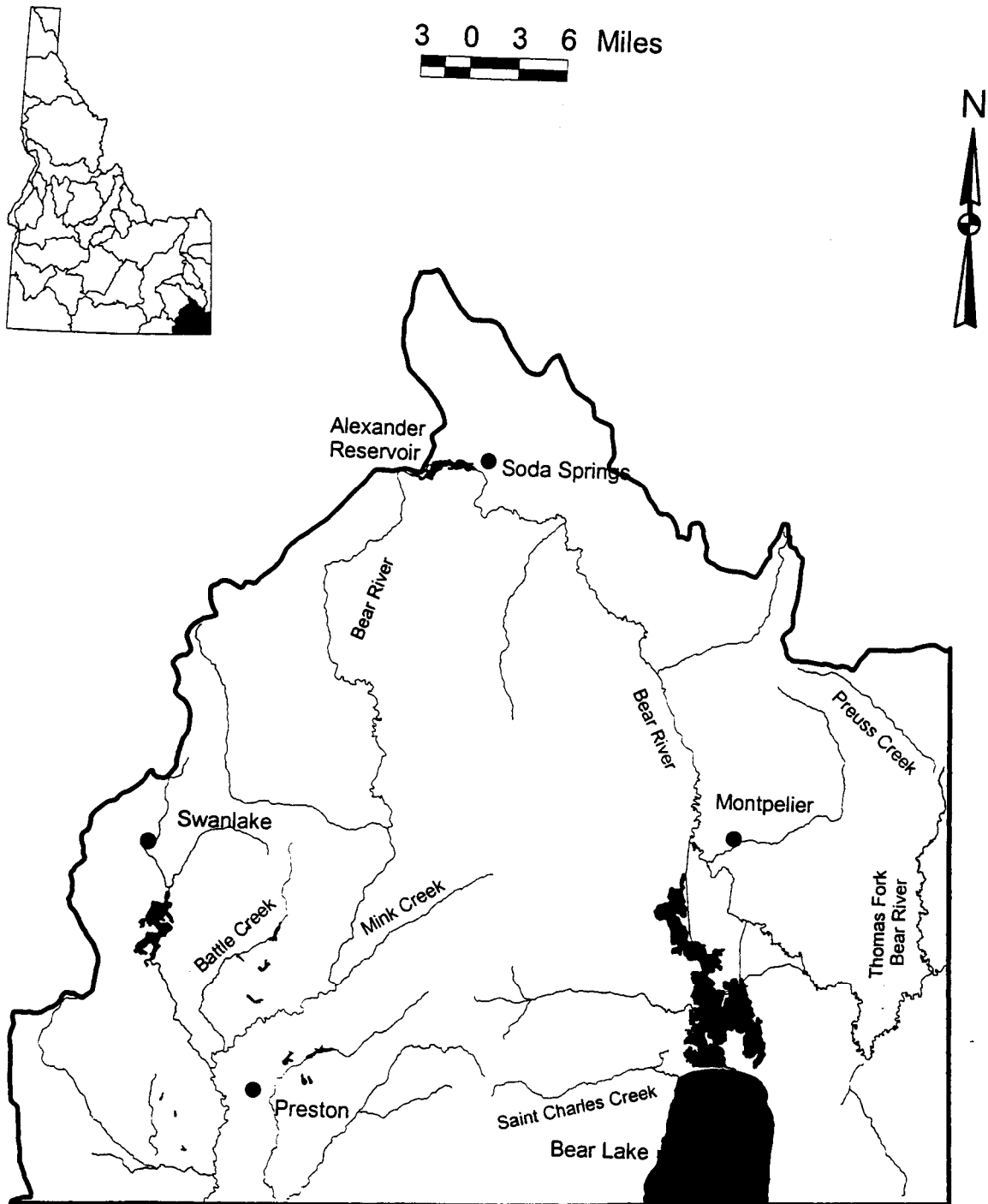


# Bear River Drainage



### 33. BEAR RIVER AND TRIBUTARIES

#### A. Overview

The Bear River and its major tributary streams comprise 524 river and stream miles. There are a number of irrigation storage reservoirs in the drainage. Bear Lake, the largest lake in the drainage, covers 70,000 surface acres of which 32,000 are in Idaho and 38,000 are in Utah.

Habitat for trout in the Bear River is marginal due to high, turbid irrigation flows in summer and inadequate flows during winter when water is being stored in Bear Lake. Power facilities have been detrimental to fishing because reservoirs associated with them have rapid turn over, are vertically unstable, and block spawning migrations. In addition, PacifiCorp's Soda Point (Alexander) and Oneida Narrows facilities peak power which severely fluctuates water levels in the river below. The river receives the heaviest fishing pressure downstream from the Alexander and Oneida dams and in the Black Canyon area. Sediments settle out in these two reservoirs so that water transparency is relatively high in these two tailrace reaches. Harvest in these areas is primarily hatchery rainbow trout and brown trout. The Department has stocked walleye into Oneida Reservoir since 1974. Due to concern for Bonneville cutthroat trout, the Department plans to terminate walleye stocking in this reservoir.

Main tributaries to the Bear River include the Malad and Cub rivers, Thomas Fork, Bloomington, Paris, Montpelier, Georgetown, Eight-Mile, Whiskey, Trout, Williams, Cottonwood and Mink creeks. St. Charles Creek is a major spawning stream for cutthroat trout from Bear Lake. Fish Haven Creek should also be a significant spawning tributary to Bear Lake, but most of, and frequently all, the water is diverted for irrigation through much of the summer.

Bonneville cutthroat trout was petitioned for listing under the Endangered Species Act in February 1998. To date a finding has not been issued by the U.S. Fish and Wildlife Service.

Headwater tributaries of the Thomas Fork contain populations of Bonneville cutthroat trout, which were identified from these tributaries in 1979 and 1981. In 1993 and 1994 Bonneville cutthroat trout were identified in most of the other tributaries of the Bear River. The upper ten miles of the Cub River contains wild cutthroat trout populations and receives heavy fishing pressure. Wild cutthroat trout harvest decreased with initiation of a two-cutthroat trout limit on streams and a two-cutthroat trout over 16-inches limit on rivers.

Most tributaries to the Bear River support populations of self-sustaining cutthroat trout, brook, or brown trout. Highest concentrations of trout are found in the middle and upstream sections. Trout in the lower sections are affected by low summer flows and high temperatures resulting from irrigation withdrawal. Catchable size rainbow trout are planted in accessible streams where habitat conditions and returns are favorable. Beginning in 1999, the Department is phasing in stocking of sterile rainbow trout. By 2001, all rainbow trout stocked in the Bear River system will be sterile.

A number of irrigation reservoirs support gamefish populations in the Bear River drainage and if sufficient water remains at the end of the irrigation season excellent growth and overwinter survival occur. Most are stocked with hatchery rainbow trout. In addition, a high percentage also contain spiny-rayed game fish such as bluegill, yellow perch and largemouth bass. Collectively, these reservoirs provide a significant amount of fishing opportunity. Irrigation storage reservoirs in the Bear River basin include Condie, Crowther, Daniels, Deep Creek, Devil Creek, Foster, Glendale, Johnson, Lamont, Little Valley, Montpelier, Oxford, Pleasantview, St. Johns, Treasureton, Twin Lakes, Weston, and Winder reservoirs.

Condie, Deep Creek, Foster, Glendale, Johnson, Lamont, Oxford, St. Johns, Twin Lakes, Weston and Winder reservoirs contain largemouth bass. All these reservoirs either have warmwater prey species of bluegill, yellow perch or crappie except Deep Creek Reservoir. Bass were illegally stocked into Deep Creek Reservoir. The Department wishes to minimize the impacts of warmwater fish on native cutthroat trout in this reservoir, so no warmwater prey species have been stocked.

Condie is managed for trophy bass, with a 20-inch minimum size limit. Yellow perch were illegally stocked in Condie Reservoir in the late 1980s. This appears to have decreased bluegill growth. The Department stocked tiger muskie at Condie Reservoir in 1995, 1997, and 2000 to increase predation on perch and provide an additional trophy species.

Quality bass rules are in effect at Glendale, St. Johns and Weston reservoirs. Do to slow growth rates of bass in southeast Idaho, some protection of bass 12 to 16 inches long is necessary to maintain populations of quality size bass that can be enjoyed on a catch-and-release basis.

Trophy and quality trout rules are in effect at Daniels and Treasureton reservoirs, respectively. These waters are very popular with catch-and-release anglers who enjoy the improved opportunity to catch large trout.

Bear Lake historically contained populations of cutthroat trout that matured at a large size, some exceeding 20 pounds. Due to overfishing, irrigation diversion and other factors, this population was reduced to a low level as early as the 1930s. As a restoration measure, Utah Department of Natural Resources, takes eggs from mature fish, which ascend Swan Creek, rears young fish in a hatchery for one year, and then releases them back in Bear Lake. The Department is protecting and restoring habitat in St. Charles Creek for Bear Lake cutthroat trout spawners. Three fish screens have been constructed and approximately two miles of heavily grazed stream banks have been protected with riparian corridor fences. The Department stocked 50,000 lake trout fingerlings on a three year rotation. Utah and Idaho agencies agreed to this program since very few naturally produced lake trout occur in the lake. Lake trout numbers were controlled. Due to concern that stocked lake trout might eventually form self-sustaining populations and then negatively impact the lake's four endemic species, the Department is strongly considering ending the lake trout stocking program at Bear Lake. As mitigation for damage caused to Bear Lake fisheries by diverting Bear River water into Bear Lake, and by the sedimentation associated with failures of the causeway dike in 1993, Utah Power and Light connected the Big Creek Branch of St. Charles Creek to Bear Lake in 1995. This will increase the spawning and rearing habitat for Bear Lake cutthroat trout and reduce loss of juvenile cutthroat trout to irrigation diversions. In addition, Bear Lake contains four other

species of endemic fish. These are Bear Lake whitefish, Bonneville whitefish, Bonneville cisco and Bear Lake sculpin. Annual studies by Utah State University and Utah's Division of Wildlife Resources have determined that populations of these species are large and stable.

B. Objectives and Programs

1. Objective: Ensure that exotic lake trout do not over-exploit endemic fish species in Bear Lake.

Program: Develop sterilization procedure for hatchery reared lake trout or end the lake trout stocking program.

2. Objective: Increase number of wild Bonneville cutthroat spawners and fry production in St. Charles Creek.

Program: Continue a graduate student project to investigate limiting factors for spawning and recruitment in St. Charles Creek.

Program: Seek ways to divert less water from St. Charles Creek.

Program: Reduce numbers of brook and rainbow trout in St. Charles Creek.

3. Objective: Improve habitat for Bonneville cutthroat trout.

Program: Seek reduced flow fluctuations through the FERC relicensing process below Alexander and Oneida dams.

Program: Stabilize reservoir levels through less dependence by irrigation on water from Alexander and Oneida reservoirs rather than from Bear Lake storage.

Program: Seek appropriate minimum flow below Bear River dams through the FERC relicensing process.

Program: Seek a fish ladder for the Cove Dam through the FERC relicensing process.

Program: Seek participants in NRCS Continuous Signup Conservation Reserve Program to protect stream banks from impacts of livestock grazing.

Drainage: BEAR RIVER					
Water	Miles/acre	Fishery			Management Direction
		Type	Species Present	Management	
Bear River from Utah state line upstream to Highway 91	30/	Mixed	Mountain whitefish Channel catfish Rainbow trout Brown trout Walleye Cutthroat trout	General     Quality	Seek stable regime and develop a more intensive salmonid fishery with better access. Assess angler support for removing limits on walleye and brown trout to reduce predation on native cutthroat trout.
Bear River from Highway 91 to Oneida Dam	2.5/	Coldwater	Rainbow trout Cutthroat trout Walleye Mountain whitefish Brown trout	Quality  General	Seek more stable flow regime. Assess angler support for removing limits on walleye and brown trout to reduce predation on native cutthroat trout. Seek reduced water discharge fluctuation through FERC relicensing.
Oneida Reservoir	/500	Mixed	Yellow perch Walleye Cutthroat trout Smallmouth bass	General	Assess angler support for removing limits on walleye to reduce predation on native cutthroat trout. Seek reduced water level fluctuations through FERC relicensing.
Bear River from Oneida Narrows Reservoir headwaters to Black Canyon	/25	Mixed	Rainbow trout Walleye Mountain whitefish Brown trout Cutthroat trout	General	Assess angler support for removing limits on walleye and brown trout.
Condie Reservoir	/117	Mixed	Rainbow trout Yellow perch Bluegill Largemouth bass Tiger muskie	General  Trophy	Stock catchable size trout.
Foster Reservoir	/146	Mixed	Rainbow trout Largemouth bass Bluegill Crappie Yellow perch	Put-and-take trout General	Evaluate percentage return-to-reel at least once this planning period, and document status of warmwater fish community.
Glendale Reservoir	/230	Mixed	Rainbow trout Cutthroat trout Bluegill Crappie Largemouth bass	Put-and-take trout General  Quality	Evaluate growth rate of largemouth bass. Evaluate percentage return-to-creel at least once this planning period. Document status of crappie populations.
Johnson Reservoir	/50	Mixed	Rainbow trout Bluegill Yellow perch Largemouth bass Tiger muskie	Put-and-take trout General	Evaluate percentage return-to-creel at least once this planning period. Determine impact to fishing of recently introduced muskie.

Lamont Reservoir	/92	Mixed	Rainbow trout Largemouth bass Bluegill Yellow perch Tiger muskie	Put-and-take trout General	Evaluate impact of tiger muskie on the over all fishing
Oxford Reservoir	/20	Warmwater	Largemouth bass Bluegill	General	Restock with bass and bluegill if necessary. Survey after year 2000 drought.
Treasureton Reservoir	/143	Coldwater	Rainbow trout Rainbow trout x cutthroat trout hybrids	Quality	Add Bonneville cutthroat trout when available.
Twin Lakes Reservoir	/446	Mixed	Rainbow trout Largemouth bass Bluegill Yellow perch	Put-and-take trout General	Evaluate percentage return-to-creel at least once this planning period. Conduct a creel survey to determine relative benefit of trout and the warmwater fish.
Weston Reservoir	/112	Mixed	Rainbow trout Yellow perch Largemouth bass	Put-and-take trout Quality bass	Assess bass population after 1998 change to quality bass rule.
Winder Reservoir	/94	Mixed	Rainbow trout Largemouth bass Bluegill Yellow perch	Put-and-take trout General	Consider renovation and change to trout only/general put-and-grow trout management due to frequent draining.
Bear River from Black Canyon to Soda Point Dam	11/	Mixed	Rainbow trout Cutthroat trout Mountain whitefish Smallmouth bass	Put-and-take trout Quality General	Evaluate fishery and monitor minimum flow. Seek appropriate minimum flow through Black Canyon through FERC relicensing.
Alexander Reservoir	/1,165	Mixed	Cutthroat trout Yellow perch Channel catfish	General	Seek less water level fluctuations through FERC relicensing. Seek increased channel catfish stocking rate of 20 large fingerlings/acre/year. Decrease bank erosion.
Bear River from Alexander Reservoir to Bear Lake	79/	Coldwater	Rainbow trout Cutthroat trout Mountain whitefish Brown trout	Put-and-take trout Quality General	Reduce turbidity. Pursue fishery mitigation through FERC relicensing and NRCS projects to achieve this goal.
Montpelier Reservoir	/120	Coldwater	Rainbow trout Cutthroat trout Yellow perch	Put-and-take trout General	Consider renovation to remove perch and restocking with Bonneville cutthroat trout.
Bloomington Lake	/10	Coldwater	Cutthroat trout	General	Stock 2,000 Bonneville cutthroat trout/year.
Little Valley Reservoir	/60	Coldwater	Rainbow trout Cutthroat trout	General General	Stock with Bonneville cutthroat trout when available.
Cub River	15/	Coldwater	Cutthroat trout Rainbow trout	Quality Put-and-take trout	Stock rainbow trout only at Willow Flats camp ground

Other Bear River tributaries that are stocked with rainbow trout catchables: Trout, Whiskey, Eight Mile, Georgetown, Paris and Bloomington.	44/	Coldwater	Rainbow trout Brook trout Brown trout Cutthroat trout	Put-and-take trout General  Wild trout	Stock rainbow trout near established campgrounds. Encourage harvest of brook and brown trout.  Limit harvest with 2-cutthroat trout limit.
All other Bear River tributaries (not stocked) and are managed for wild cutthroat trout with some feral brown and brook trout.	44/	Coldwater	Cutthroat trout Brook trout Brown trout Rainbow trout	Wild trout General	Manage for wild cutthroat trout with 2-cutthroat trout limit. Encourage harvest of other trout.
St. Charles Creek.	20/	Coldwater	Cutthroat trout Brook trout Rainbow trout	Catch-and-release	Continue to improve habitat and fish passage conditions in St. Charles Creek. Look for ways to increase natural spawning success, decrease irrigation quantity and to minimize losses into irrigation canals.
Bear Lake	/70,000	Coldwater	Cutthroat trout Lake trout Bonneville cisco Bear Lake whitefish Bonneville whitefish	Quality	Coordinate with Utah Division of Wildlife Resources to optimize conditions for native species. Seek methods to sterilize lake trout prior to stocking or consider terminating the lake trout stocking program.
Fish Haven Creek	10/	Coldwater	Cutthroat trout Brook trout Rainbow trout	General	Continue to improve habitat and fish passage conditions in Fish Haven Creek. Look for ways to increase natural spawning success, decrease irrigation quantity and to minimize losses into irrigation canals.
Thomas Fork Creek		Coldwater	Cutthroat trout	Conservation	Participate in USFS and NRCS habitat improvement programs. Protect wild cutthroat trout with restrictive regulations.
Preuss Creek		Coldwater	Cutthroat trout	Conservation	Monitor new allotment management plan. Protect wild cutthroat trout with restrictive regulations.
Dry Creek		Coldwater	Cutthroat trout	Conservation	Monitor new allotment management plan. Protect wild cutthroat trout with restrictive regulations.
Giraffe Creek		Coldwater	Cutthroat trout	Conservation	Monitor new allotment management plan. Protect wild cutthroat trout with restrictive regulations.